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PATENT
RD-26408-5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John Frederick Ackerman et al.

Serial No.: 10/632,741

Filed: August 1, 2003

For: APPARATUS FOR WASHING GAS
TURBINE ENGINES

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: Art Unit: 1746
:
: Examiner: Joseph L. Perrin
:
:
:

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Respectfully submitted,

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REPLY BRIEF UNDER 37 C.F.R. § 41.41

Serial Number: 10/632,741

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John Frederick Ackerman :
: Art Unit: 1746
Serial No.: 10/632,741 :
: Examiner: Joseph L. Perrin
Filed: 08/01/2003 :
:
For: APPARATUS FOR WASHING :
GAS TURBINE ENGINES :
:

REPLY BRIEF UNDER 37 CFR § 41.41

Mail Stop Appeal Brief- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 223 13-1450

Sir:

The Reply Brief is presented in response to the Examiner's Answer mailed December 8, 2006, and in support of the Notice of Appeal to the Board of Patent Appeals and Interferences filed on February 10, 2006, the Appeal Brief filed on April 17, 2006, the subsequent Amended Appeal Brief filed on July 12, 2006, and the subsequent Supplemental Appeal Brief filed on September 15, 2006, from the Final Rejection of claims 6, 7, 9-12, and 14-16 of the above-identified application, as set forth in the Final Office Action mailed on August 10, 2005.

No fees are due. The Appellants respectfully request consideration and reversal of the Examiner's rejections of the pending claims.

STATUS OF THE CLAIMS

Claims 6, 7, 9-12, and 14-16 are pending in the application. Claims 6, 7, 9-12, and 14-16 are rejected. Claims 6, 7, 9-12, and 14-16 are being appealed.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- A. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 112, first paragraph.
- B. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 112, first paragraph.
- C. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,713,120 (Hodgens).
- D. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,059,123 (Bartos).

ARGUMENT

A. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 112, first paragraph.

The following discussion sets forth the Section 112, first paragraph, rejection against Claims 6, 7, 9-12, and 14-16 and summarizes current and applicable law with respect to enablement.

1. The Cited Rejection

In the Office Action dated August 10, 2005, and made final, and the Examiner's Answer dated December 8, 2006, Claims 6, 7, 9-12, and 14-16 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

2. Applicable Law With Respect To Enablement

Section 112, in pertinent part provides:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

As is well established, the first paragraph of 35 U.S.C. 112 sets forth the minimum requirements for the quality and quantity of information that must be contained in the patent to justify the grant. The patentee must disclose in the patent sufficient information to put the public in possession of the invention and to enable those skilled in the art to make and use the invention. The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation. *United States v. Telectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988)

3. The Section 112, First Paragraph Rejection Of Claims 6, 7, 9-12, and 14-16 Is Not A Proper Rejection.

Applicants respectfully submit that the Section 112, first paragraph rejection of Claims 6, 7, 9-12, and 14-16 is not a proper rejection because Claims 6, 7, 9-12, and 14-16 satisfy the requirements of Section 112.

Applicants respectfully submit that the specification satisfies the requirements of Section 112, first paragraph. More specifically, Applicants respectfully submit that the disclosure, including the Figures, would enable one skilled in the art to make and/or use the invention with only a modicum of study. The Federal Circuit has opined in *Verve LLC v. Crane Cams, Inc.*, 65 USPQ 2d 1051, 1053-1054 (Fed. Cir. 2002), that “[p]atent documents are written for persons familiar with the relevant field; the patentee is not required to include in the specification information readily understood by practitioners, lest every patent be written as a comprehensive tutorial and treatise for the generalist, instead of a concise statement for persons in the field.” Moreover, the Federal Circuit states in *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991), that “a patent need not teach, and preferably omits, what is well known in the art.”

In the present case, Applicants respectfully submit that the specification is complete and that one skilled in the art would understand the present invention, including the use of a first and/or a second fluid being an anti-static liquid, after reading the specification, in view of the Figures. In contrast to the assertion on page 3 of the Examiner’s Answer that “the specification . . . does not reasonably provide enablement for a wash system having a first and second fluid wherein one of said first and second fluids comprise an anti-static liquid”, Applicants submit that such claim language is used to clearly recite that one of the two liquids being used in the engine water was is an anti-static liquid. Rather, the terms “first” and “second”, as used in the claims, are merely used to identify the liquids within the claims and are not used as nouns.

Moreover, in contrast to the assertion on page 4 of the Examiner’s Answer that the “original disclosure is not enabled for a second fluid ‘configured to facilitate reducing a rate of formation of particulate matter (*i.e.* an anti-static liquid) and/or a first fluid being an anti-static

liquid”, Applicants respectfully submit that the disclosure does disclose such an embodiment. For example, on page 4 of the specification, Applicants disclose that “in one embodiment, the second liquid is injected 80 into engine 10 simultaneously with the first liquid, as the first liquid is injected 60 into engine 10.” One of ordinary skill in the art would understand that in such an embodiment, the first and/or second liquid be anti-static fluid.

Accordingly, Applicants respectfully submit that a second fluid and/or a first fluid being an anti-static liquid is described in sufficient detail that would be understood by one skilled in the art after reading the specification in light of the Figures, and that one of ordinary skill in the art would be able to make and use the claimed invention without undue experimentation.

Accordingly, Applicants respectfully submit that Claims 6, 7, 9-12, and 14-16 satisfy the requirements of Section 112, first paragraph.

For at least the reasons set forth above, Applicants respectfully request that the Section 112, first paragraph, rejection of Claims 6, 7, 9-12, and 14-16 be withdrawn.

B. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 112, first paragraph.

The following discussion sets forth the Section 112, first paragraph, rejection against Claims 6, 7, 9-12, and 14-16 and summarizes current and applicable law with respect to enablement.

1. The Cited Rejection

In the Office Action dated August 10, 2005, and made final, and the Examiner’s Answer dated December 8, 2006, Claims 6, 7, 9-12, and 14-16 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

2. Applicable Law With Respect To Enablement

Section 112, in pertinent part provides:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make

and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

As is well established, the first paragraph of 35 U.S.C. 112 sets forth the minimum requirements for the quality and quantity of information that must be contained in the patent to justify the grant. The patentee must disclose in the patent sufficient information to put the public in possession of the invention and to enable those skilled in the art to make and use the invention. The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation. *United States v. Telectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988)

3. The Section 112, First Paragraph Rejection Of Claims 6, 7, 9-12, and 14-16 Is Not A Proper Rejection.

Applicants respectfully submit that the Section 112, first paragraph rejection of Claims 6, 7, 9-12, and 14-16 is not a proper rejection because Claims 6, 7, 9-12, and 14-16 satisfy the requirements of Section 112.

Applicants respectfully submit that the specification satisfies the requirements of Section 112, first paragraph. More specifically, Applicants respectfully submit that the disclosure, including the Figures, would enable one skilled in the art to make and/or use the invention with only a modicum of study. The Federal Circuit has opined in *Verve LLC v. Crane Cams, Inc.*, 65 USPQ 2d 1051, 1053-1054 (Fed. Cir. 2002), that “[p]atent documents are written for persons familiar with the relevant field; the patentee is not required to include in the specification information readily understood by practitioners, lest every patent be written as a comprehensive tutorial and treatise for the generalist, instead of a concise statement for persons in the field.” Moreover, the Federal Circuit states in *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991), that “a patent need not teach, and preferably omits, what is well known in the art.”

In the present case, Applicants respectfully submit that the specification is complete and that one skilled in the art would understand the present invention, including an anti-static fluid,

after reading the specification, in view of the Figures. The Examiner's Answer asserts on page 10 that "stating a potential property of a liquid does not satisfy the enablement requirement of what liquids may or may not include such potential property. To date, appellant has failed to disclose a single working example of a liquid readable on 'anti-static liquid' . . ." and that "Appellant's disclosure is textually silent with respect to what liquids . . . would read on an 'anti-static' liquid."

However, page 5 of the specification, for example, recites that "the anti-static coating applied to the compressor blades facilitates suppressing electrostatic attraction of the blades" and "[a]ccordingly, particles dependent on electrostatic attraction for attachment to the compressor blades are neutralized and flow through the engine, thus reducing a rate of formation of particulate matter within the engine." Moreover, page 4 of the Applicants' specification, for example, states that:

the second liquid is selected to facilitate optimizing performance of engine 10. More specifically, when the second liquid is selected, several factors unique to engine 10 are considered including, but not limited to, a type of material used in fabricating the compressor assembly blades, a type of air-filtration system (not shown) used with engine 10, and a geographic location of where engine 10 is primarily operated.

Applicants therefore respectfully submit that one skilled in the art would not need to perform undue experimentation to determine what constitutes an anti-static liquid, but rather could duplicate the invention using known liquids that suppress electrostatic attraction of the blades and neutralize particles dependent upon electrostatic attraction taking into consideration the various factors to optimize performance of the engine.

Moreover, in contrast to the assertion in the Examiner's Answer on page 11 that "Applicant's argument that 'a quick search of Dongnam Chemical Industries, Ltd.'s website' to search for an 'anti-static liquid' is sufficient enablement of an 'anti-static' liquid is not persuasive", Applicants submit that the current specification is written for persons familiar with the relevant field such that Applicants are not required to include in the specification information readily understood by practitioners. Applicants further submit that one of ordinary skill in the art

would know which anti-static liquids would serve the function of this invention and which anti-static liquids would not serve the function of this invention. Accordingly, Applicants respectfully submit that Claims 6, 7, 9-12, and 14-16 satisfy the requirements of Section 112, first paragraph.

For at least the reasons set forth above, Applicants respectfully request that the Section 112, first paragraph, rejection of Claims 6, 7, 9-12, and 14-16 be withdrawn.

C. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 4,713,120 (Hodgens)

The following discussion sets forth the Section 102 rejection cited against the pending claims and summarizes current and applicable law with respect to obviousness. In addition, a discussion of the rejection with respect to each independent claim, in view of current and applicable law, is provided.

1. The Cited Rejections

In the Office Action dated August 10, 2005, and made final, and the Examiner's Answer mailed December 8, 2006, Claims 6, 7, 9-12, and 14-16 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hodgens.

2. Applicable Law With Respect To Patentability

Section 102, in pertinent part provides:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States

As explained by the Federal Circuit, to satisfy the requirements of Section 102(b), which is generally referred to as “anticipation”, each and every element of the claimed invention must be disclosed in a single prior art reference or embodied in a single prior art device. *Verdegaal Brothers Inc. v. Union Oil Company of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

3. The Section 102 Rejection Of Claims 6, 7, 9-12, and 14-16 Is Not A Proper Rejection

Applicants respectfully submit that the Section 102(b) rejection of presently pending Claims 6, 7, 9-12, and 14-16 is not a proper rejection. Specifically, Hodgens does not describe each and every recitation of Claims 6, 7, 9-12, and 14-16. For these reasons, Applicants respectfully request that the Section 102(b) rejection be withdrawn, and respectfully traverse the rejection of Claims 6, 7, 9-12, and 14-16 under U.S.C. § 102(b) as being anticipated by Hodgens.

Claim 6 recites an apparatus for a gas turbine engine comprising “a washing system comprising a pump in flow communication with at least one nozzle, a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second, said washing system configured to inject said first fluid and said second fluid into the gas turbine engine, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing a rate of formation of particulate matter within the gas turbine engine.”

The assertion on page 13 of the Examiner’s Answer that “in the instant case, HODGENS discloses plural steps of applying aqueous solutions of various additives in combination with the use of a cleaning composition for turbine engines, including chelating agents which by their chemical nature are inherently polar and conductive, thus readable on ‘anti-static’” is respectfully traversed. Hodgens does not describe nor suggest an apparatus for a gas turbine engine including a washing system that includes an anti-static liquid. Rather, Hodgens describes a composition and method for removing deposits from a gas turbine engine, but does not describe or suggest an anti-static liquid.

The Federal Circuit opined that “[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. In re King, 231 USPQ 136 (Fed. Cir. 1986). Applicants respectfully submit that the Examiner’s Answer has not provided any basis in fact and/or technical reasoning that Hodgens includes an “anti-static” liquid other than the Examiner’s mere assertion that “chelating agents . . . are inherently polar and conductive, thus readable on ‘anti-static’.” Applicants submit that chelating agents are not substantially equivalent to an anti-static liquid.

Accordingly, for at least the reasons set forth above, Claim 6 is submitted to be patentable over Hodgens.

Claims 7 and 9-11 depend from independent Claim 6. Applicants submit that when the recitations of Claims 7 and 9-11 are considered in combination with the recitations of Claim 6, the recited apparatus is not taught nor suggested by Hodgens, and accordingly, Applicants submit that dependent Claims 7 and 9-11 are patentable over Hodgens.

Claim 12 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the gas turbine engine.”

Hodgens does not describe nor suggest a gas turbine engine washing system including each and every structural limitation claimed by the Applicants as asserted on page 15 of the Examiner’s Answer. Specifically, Hodgens does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Hodgens describes a composition and method for removing deposits from a gas turbine engine, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 12 is submitted to be patentable over Hodgens.

Claim 14 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the

gas turbine engine, said first fluid comprises an anti-static liquid configured to coat at least a portion of the engine to reduce electrostatic attraction within the gas turbine engine.”

Hodgens does not describe nor suggest a gas turbine engine washing system including each and every structural limitation claimed by the Applicants as asserted on page 15 of the Examiner’s Answer. Specifically, Hodgens does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Hodgens describes a composition and method for removing deposits from a gas turbine engine, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 14 is submitted to be patentable over Hodgens.

Claim 15 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the gas turbine engine, said first fluid comprises an anti-static liquid that is injected into the engine after particulate matter has been removed from the engine.”

Hodgens does not describe nor suggest a gas turbine engine washing system including each and every structural limitation claimed by the Applicants as asserted on page 15 of the Examiner’s Answer. Specifically, Hodgens does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Hodgens describes a composition and method for removing deposits from a gas turbine engine, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 15 is submitted to be patentable over Hodgens.

Claim 16 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid

contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the gas turbine engine, said first fluid comprises an anti-static liquid that is injected into the engine after the engine has been operated.”

Hodgens does not describe nor suggest a gas turbine engine washing system including each and every structural limitation claimed by the Applicants as asserted on page 15 of the Examiner’s Answer. Specifically, Hodgens does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Hodgens describes a composition and method for removing deposits from a gas turbine engine, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 16 is submitted to be patentable over Hodgens.

For at least the reasons set forth above, Applicants respectfully request that the Section 102(b) rejection of Claims 6, 7, 9-12, and 14-16 as being anticipated by Hodgens be withdrawn.

D. The rejection of Claims 6, 7, 9-12, and 14-16 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 4,059,123 (Bartos)

The following discussion sets forth the Section 102 rejection cited against the pending claims and summarizes current and applicable law with respect to obviousness. In addition, a discussion of the rejection with respect to each pending independent claim, in view of current and applicable law, is provided.

1. The Cited Rejections

In the Office Action dated August 10, 2005, and made final, Claims 6, 7, 9-12, and 14-16, and the Examiner’s Answer mailed December 8, 2006, were rejected under 35 U.S.C. § 102(b) as being anticipated by Bartos.

2. Applicable Law With Respect To Patentability

Section 102, in pertinent part provides:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States

As explained by the Federal Circuit, to satisfy the requirements of Section 102(b), which is generally referred to as “anticipation”, each and every element of the claimed invention must be disclosed in a single prior art reference or embodied in a single prior art device. *Verdegaal Brothers Inc. v. Union Oil Company of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

3. The Section 102 Rejection Of Claims 6, 7, 9-12, and 14-16 Is Not A Proper Rejection
Applicants respectfully submit that the Section 102(b) rejection of presently pending Claims 6, 7, 9-12, and 14-16 is not a proper rejection. Specifically, Bartos does not describe each and every recitation in Claims 6, 7, 9-12, and 14-16. For these reasons, Applicants respectfully request that the Section 102(b) rejection be withdrawn, and respectfully traverse the rejection of Claims 6, 7, 9-12, and 14-16 under U.S.C. § 102(b) as being anticipated by Bartos.

Bartos, et al. describe a self-contained turbine engine cleaning and preservation unit 10. Unit 10 includes a water reservoir 18, a preservative reservoir 20, and a solvent reservoir 24. Solvent reservoir 24 contains a cleaning solution, and preservative reservoir 20 contains a preservation solution for protecting engine components from rust.

Claim 6 recites an apparatus for a gas turbine engine comprising “a washing system comprising a pump in flow communication with at least one nozzle, a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second, said washing system configured to inject said first fluid and said second fluid into the gas turbine engine, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing a rate of formation of particulate matter within the gas turbine engine.”

The assertion on pages 15 and 16 of the Examiner’s Answer that “Bartos clearly discloses the claimed structure of cleaning machine (10) for cleaning a turbine engine with compressor . . . including a pump . . . fluid reservoirs . . . and nozzle manifold . . . having such configuration to be capable of performing appellant’s significant amount of intended use

language” is respectfully traversed. Bartos does not describe nor suggest an apparatus for a gas turbine engine including a washing system that includes an anti-static liquid. The Examiner’s Answer also asserts on Page 16 that “BARTOS provides explicit teaching of supplying solvent, cleaners, preservatives and water to plural reservoirs . . . and given the broadest reasonable interpretation in view of appellant’s original disclosure . . . each of the liquids in BARTOS are considered to read on appellant’s ‘anti-static’ liquid, especially water which is well known to naturally have conductive properties” Specifically, Applicants respectfully submit that water is not substantially equivalent to an anti-static liquid in washing systems for a gas turbine engine. The mere assertion that liquids disclosed in Bartos, such as water, read on an anti-static liquid as disclosed by the Applicants is respectfully traversed. Applicants submit that Bartos describes a composition and method for removing deposits from a gas turbine engine, but does not describe or suggest an anti-static liquid.

Accordingly, for at least the reasons set forth above, Claim 6 is submitted to be patentable over Bartos.

Claims 7 and 9-11 depend from independent Claim 6. Applicants submit that when the recitations of Claims 7 and 9-11 are considered in combination with the recitations of Claim 6, the recited apparatus is not taught nor suggested by Bartos, and accordingly, Applicants submit that dependent Claims 7 and 9-11 are patentable over Bartos.

Claim 12 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the gas turbine engine.”

Bartos does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Bartos describes a self-contained turbine engine cleaning and

preservation unit, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 12 is submitted to be patentable over Bartos.

Bartos does not describe nor suggest a gas turbine engine washing system “disclosing the claimed structure of cleaning machine (10) for cleaning a turbine engine . . .” as asserted on pages 15 and 16 of the Examiner’s Answer. Specifically, Bartos does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Bartos describes a self-contained turbine engine cleaning and preservation unit, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 12 is submitted to be patentable over Bartos.

Claim 14 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the gas turbine engine, said first fluid comprises an anti-static liquid configured to coat at least a portion of the engine to reduce electrostatic attraction within the gas turbine engine.”

Bartos does not describe nor suggest a gas turbine engine washing system “disclosing the claimed structure of cleaning machine (10) for cleaning a turbine engine . . .” as asserted on pages 15 and 16 of the Examiner’s Answer. Specifically, Bartos does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Bartos describes a self-contained turbine engine cleaning and preservation unit, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 14 is submitted to be patentable over Bartos.

Claim 15 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid

contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the gas turbine engine, said first fluid comprises an anti-static liquid that is injected into the engine after particulate matter has been removed from the engine.”

Bartos does not describe nor suggest a gas turbine engine washing system “disclosing the claimed structure of cleaning machine (10) for cleaning a turbine engine . . .” as asserted on pages 15 and 16 of the Examiner’s Answer. Specifically, Bartos does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Bartos describes a self-contained turbine engine cleaning and preservation unit, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 15 is submitted to be patentable over Bartos.

Claim 16 recites a gas turbine engine washing system configured to reduce particulate matter within the gas turbine engine, the gas turbine engine including a compressor, wherein the washing system comprises: “a first fluid contained within a first reservoir, a second fluid contained within one of the first and a second reservoir, a nozzle in flow communication with at least one of said first and second reservoirs and for injecting said first and second fluids into said the gas turbine engine upstream from said compressor, wherein one of said first and second fluids comprises an anti-static liquid that facilitates reducing electrostatic attraction within the gas turbine engine, said first fluid comprises an anti-static liquid that is injected into the engine after the engine has been operated.”

Bartos does not describe nor suggest a gas turbine engine washing system “disclosing the claimed structure of cleaning machine (10) for cleaning a turbine engine . . .” as asserted on pages 15 and 16 of the Examiner’s Answer. Specifically, Bartos does not describe nor suggest a gas turbine engine washing system that includes an anti-static liquid. Rather, Bartos describes a self-contained turbine engine cleaning and preservation unit, but does not describe or suggest an anti-static liquid. Accordingly, for at least the reasons set forth above, Claim 16 is submitted to be patentable over Bartos.

For at least the reasons set forth above, Applicants respectfully request that the Section 102(b) rejection of Claims 6, 7, 9-12, and 14-16 as being anticipated by Bartos be withdrawn.

Respectfully submitted,

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